



SWARC NEWS-12/23

Notes from KO4ZFO (Rodney)

First, let me thank all of those who attended the December meeting. We had quite a lot of good side dishes and desserts to accompany the ham provided by the club. Everyone seemed to have a lot of conversations to catch up with others, but it suddenly became very quiet once we started enjoying the feast of food. Thanks to all for coming and bringing some of your best recipes.

Stay safe and warm; have a wonderful Christmas and Happy New Year and I look forward to seeing everyone at our next meeting in January, **which, by the way, will be in Bldg 1, same time and day of week (per Gator, KW4MG).**

I am happy to report that Don Nicholson (KN4OEY) has taken over as Net Manager. We still could use some backup folks for Net Control positions so that all nets are easily covered should someone not be able to call a scheduled net.

We ask you to keep the following in your thoughts and prayers:

Gary, KO4LQX, Kenny, KJ4CVK, Mike, KD4MC, and Steve, KA0GMY.

Steve, KA0GMY, continues to have health issues, so remember him, Steve Jr., and Miss Gloria as well (particularly). In addition, they are currently in the throes of moving—they sold their house on the two-acre property and are moving into a mobile home type of setting.



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Gary Plante, KO4LQX, reports that his latest scans showed progress, but he had to take steroids to counter some bleeding and inflammation in the throat's sinus cavities. He needs our continued thoughts and prayers as it seems he still has many hurdles to overcome before healing is complete!

Mike Callam (KD4MC) seems to be doing okay; he is returning to pursuits he had before Velda's protracted illness and subsequent death, but we should remember that it takes a long time to grieve and recover from the loss of one's spouse of many years.

Kenny (KJ4CVK), has ongoing health issues, so keep him in your thoughts.

SWARC de KO4ZFO

Notes from WB4SMS (Steve)

Our January 2024 meeting will focus on a discussion of ARRL Field Day, which is really six months away, but will be upon us in no time. The January meeting is our annual Chili cookoff, so come with your favorite recipe and/or bring appropriate condiment type sides.

SWARC de WB4SMS

SWARC 6 December 2023 Meeting Minutes



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The meeting was well attended and there was plenty of food. This was certainly one of the best turnouts of members and guests in quite some time.

Those in physical attendance were:

Richard Hall (K7RLH), Bill Blomgren (KK4QDZ), Al Crawford (WA4TCJ), Linda Crawford (KI4LO), Steve Suzanne (WB4SMS) and wife, Liz, Don Nicholson (KN4OEY), Paul Nicholson (KN4NGI), Brian Knox (KK4BK), Dave Krum (NW3U) and Miss Penny, Rodney Warren (KO4ZFO), Robert Walker (KQ4GSA), Steve Worth (NC4SW), Christy Fernandini (KJ4AEO), Gino Fernandini (KI4YXO), and son, Rich Gehle (N4DPQ) and wife Jane.

Our lone guest was James Wong, NC Emergency Management Coordinator.

The meeting was opened at 7:00 pm with Pledge of Allegiance led by Brian (KK4BK). Introductions were made around the room—we had one guest as noted. Officer and chair reports are included in the body of these minutes or as newsletter items from our President and Vice President.

Old/Unfinished Business

Richard (K7RLH) moved that we donate \$600 to Danny Hampton (K4ITL) for repeater maintenance. The motion was seconded and passed.

Rodney (KO4ZFO) reported that he and Brian (KK4BK) had worked on the website and he asked members to take a look and offer suggestions for additions/deletions or improvements.



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New Business

Richard (K7RLH) also moved that we make Ronnie Casey (K4JDR) a Lifetime Member of SWARC recognizing his upkeep of the Carolina 440 network that we all use. The motion was seconded and passed.

Program/Presentation

Guest James Wong gave an update on the formation of a CERT team for Fuquay Varina and he acknowledged our support of the FV Christmas parade on 3 December.

Brian Knox (KK4BK), the Nominating Chair, asked us to start considering candidates for the various officer positions; those he described as capable of moving the club forward.

There was no program due to the holiday nature of the gathering, so conversations resumed where they left off when food was served!

Public Service

Check the HPSNC.org web site often for Public Service opportunities. The public service season is upon us and events need volunteers. You may also get to public service events on the RARS website.



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TREASURER'S REPORT

Christy Fernandini's report detailed no change in the finances during November with matching intake and outgo of \$53.00. Balance of \$2,357.58 with no obligated funds or invoices outstanding, except as noted above. Overall, the club is healthy but we could use more renewals from members and recruiting of new ones.

The meeting was officially adjourned at 7:20 pm.

Respectfully submitted,
Richard Hall K7RLH
Secretary and Newsletter Editor

MEMBERSHIP

You can bring a check or cash for dues to the next meeting or mail them to the club PO box and Christy will advise she has received them. Also, you can now renew somewhat online by contacting Christy and giving her the appropriate credit card info for the 'Square' account. Christy's email is christyfernandini@outlook.com. Make checks payable to South Wake ARC and send to South Wake ARC – PO Box 1565 – Fuquay Varina, NC 27526



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NET REPORT

SWARC Group – November 2023

There were three hams who were net check-in champs for November; they are Bill (KK4QDZ,) Al (WA3JJG), and Mark (KD7AAG). The monthly total of check-ins was 292—a slight decrease from last month! Note that **not** all net controls record their counts so numbers could actually be higher than recorded.

- Saturday and Sunday evenings will be called by KT4JR & K7RLH
- KO4ZFO will call Monday evenings
- KN4OEY will call Tuesday evenings
- KK4BK will call Wednesday evenings except on meeting nights
- KO4ZFO or a board member will call Thursday evenings
- Fridays will continue to be called by NC4MP
- And we need backups – JUST BECAUSE.

Please contact Rodney Warren (KO4ZFO) or Don Nicholson (KN4OEY), if you are interested in calling one or more nets.

SWARC Mission Statement

South Wake ARC's primary purpose is to further the Amateur Radio Service through programs, activities, and education, in order to promote the radio knowledge, fraternalism and individual operating efficiency of its



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members. Further, it shall be our purpose to support the welfare of our community through public service including radio communications for emergency situations and public events, and through providing information, training, and assistance to individuals or organizations with an interest in the Amateur Radio Service. Refer to the SWARC web site for the Board of Directors/Officers and Appointed Positions.

LINKS (if you have other links you want added then send them to me)

PRN

A Wide Area Digital Amateur Radio Network

www.ncprn.net

GigaParts

www.gigaparts.com

QRZ

www.qrz.com

Ham Radio Outlet HRO

www.hamradio.com

Raleigh Amateur Radio Society RARS

www.rars.org

Johnson Amateur Radio Society JARS

www.jars..net

South Wake Amateur Radio Club SWARC

www.southwakearc.com

Carolina 440 Network

www.carolina440.net

North Carolina Packet

www.ncpacket.com

TARPN (Terrestrial Amateur Packet Radio Net)

www.tarpn.net

Useful Ham Info

www.torborg.com/a

Five County Ham Radio Enthusiasts

www.fivecountyhre.org



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Bandwidth Limits Replace Symbol Rates on the HF Bands, Other Bands Open for Comment

The Federal Communications Commission (FCC) [published new rules](#) adopted last month that replace the symbol rate restrictions on the HF bands with a bandwidth limit of 2.8 kHz. The new rules go into effect January 8, 2024.

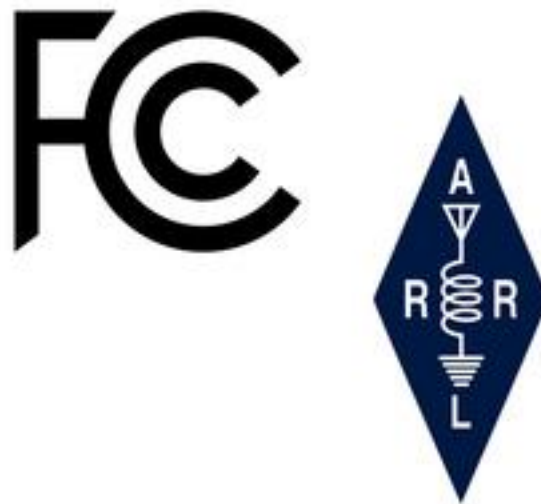
The bands and band segments affected by the rules change are those authorized for data transmission between 160 and 10 meters, exclusive of 60 meters (where no change was made).

In adopting a bandwidth limit in place of the baud rate limit the FCC agreed with ARRL that some limitation is necessary because "without a baud rate or bandwidth limit, data stations using a large amount of spectrum for a single emission could do so to the detriment of simultaneous use by other stations using narrowband emission modes."

ARRL has advocated for this change for a long time. The move opens amateur data communications to faster and more modern modes and restores the incentive for amateurs to experiment with and develop faster and more efficient data methods. Previously, ARRL obtained waivers to the symbol rate rules on a case-by-case basis to facilitate communications during situations like hurricane responses. These delays will now be removed, permitting drills to be conducted with the faster modes and more timely responses when needed.

The FCC also requested comment on removing similar symbol rate restrictions in the rules governing 135.7 - 137.8 kHz (2200-meter band), 472 - 479 kHz (630-meter band), and the very high-frequency (VHF) and ultra-high frequency (UHF) bands.

The VHF bands with baud rates are the 6-meter band, 2-meter band, and the 1.25-meter band. The single UHF band with a baud rate is the 70-centimeter band (420 - 450 MHz). The [Further Notice of Proposed Rule Making](#) (FNPRM) proposes to maintain the existing bandwidth limits in the Commission's rules for these VHF and UHF bands but seeks comment on whether they should be kept, and if so, whether the bandwidths should be changed. The Commission also





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sought comment on whether bandwidth limits should be adopted for application to the 2200 and 630-meter bands, and if so, what an appropriate bandwidth limit would be.

Public comments on these additional issues are sought in the FNPRM. The comment period is open until January 8, 2024. Replies to comments are due no later than January 22, 2024. If changes are later adopted, the rules will go into effect in the same manner as they did for the other bands -- after notice and publication in the *Federal Register*.

IARU and ARRL Attending WRC-23 in Dubai, UAE

The International Telecommunication Union (ITU) World Radiocommunication Conference 2023 (WRC-23) began November 20 in Dubai, United Arab Emirates, and will continue through December 15, 2023. During WRC-23, the ITU's 193 sovereign Member States, each with one equal vote, will address items on a formal agenda in an effort to reach consensus on revisions to the ITU Radio Regulations, the international treaty governing the global use of radio-frequency spectrum and satellite orbits.



IARU Vice President Ole Garpestad, LA2RR (on the left), and IARU Secretary Joel Harrison, W5ZN (on the right) met with



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Mario Maniewicz, (in the center), Director of the ITU Radiocommunication Bureau during, WRC-23.

WRC's are held every 3 to 4 years and include the Amateur and Amateur Satellite Service allocations.

The International Amateur Radio Union (IARU) is a Sector Member of the ITU and globally represents the interests of amateur radio. A contingent of representatives from IARU and ARRL in the US are attending the meetings. ARRL serves as the International Secretariat of the IARU.

The agenda of items to be reviewed for WRC-23 was established at the completion of the last conference in 2019. Of primary importance to the Amateur and Amateur Satellite Services is Agenda Item 9.1 topic b, which addresses the amateur use of the 23 - centimeter band and the co-frequency use by several radio navigation satellite service (RNSS) systems in the 1240 - 1300 MHz band.





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IARU President Tim Ellam, VE6SH, (on the left), and IARU Vice President Ole Garpestad, LA2RR (on the right) met with ITU Secretary-General Doreen Bogdan-Martin, KD2JTX, (in the center) during WRC-23.

The work at WRC-23 involves several committees, working groups, and sub - working groups that negotiate spectrum matters in an effort to reach consensus on the conference agenda items to subsequently be presented and formally adopted during the final plenary session.

A report on items of interest to amateur radio from WRC-23 will be reported at its conclusion.

December ARISS Contact with South Carolina School

On Tuesday, December 5, students at Orangeburg Christian Academy (OCA) in Orangeburg, South Carolina, had the opportunity to speak with Astronaut Jasmin Moghbeli, KI5WSL, onboard the International Space Station (ISS).



NASA Astronaut Jasmin Moghbeli, KI5WSL.
[NASA photo]

OCA is a small school of about 250 students in grades K-12. The faculty includes space science, space travel, science on the ISS, electronics, amateur radio, and more astronomy in various STEM studies.

The event lasted just more than 10 minutes, and Moghbeli answered 20 questions ranging from safety in space to what astronauts drink in space and what it is like to shower in space.



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The contact was arranged by Amateur Radio on the International Space Station (ARISS). Each year, ARISS conducts 60 - 80 of these special amateur radio contacts between students around the globe and crew members with ham radio licenses aboard the ISS.

Phillip Shreves, N7GZT, assisted with the ARISS contact by operating the link to the radio ground station to establish and maintain the ISS connection.

40 Years of Amateur Radio in Space

Melissa Gaskill, a science author from Austin, Texas, has written a comprehensive review about the 40-year history of amateur radio in space. In her article, "[Ham Radio in Space: Engaging with Students Worldwide for 40 Years](#)," Gaskill explores the Shuttle Amateur Radio Experiment (SAREX), which is now known as Amateur Radio on the International Space Station (ARISS).

Gaskill said that while she wrote the article, she is not an expert on the subject but there are many who are including Kenneth Ransom, N5VHO, International Space Station (ISS) Ham Project Coordinator since 2004.

Ransom said that amateur radio in space was a possibility even before 1983, when Astronaut Owen Garriott, W5LFL (SK), made history during the STS-9 Space Shuttle Columbia mission with the first amateur radio contact from space. NASA had been looking for ways to bring amateur radio to Skylab (a space station designed as an orbiting workshop for scientific research) and even the moon.

"Having amateur radio in space has added a heightened level of interest, not only for hams, but for the overall program as well," said Ransom. "Just being able to talk to a crew member on board a spacecraft is an amazing accomplishment."

Garriott's son, Richard Garriott, who operated amateur radio during a short-term mission on the ISS in 2008, will present a special webinar on December 7, 2023, at 1800 UTC to discuss his father's first historic mission. The presentation will be available to watch on [ARISS - YouTube](#). The event is hosted by ARISS International Chair Frank Bauer, KA3HDO.

ARISS is a cooperative venture of international amateur radio societies and the space agencies that support the ISS. In the US, participating organizations include NASA's Space Communications and Navigation (SCaN) program, the ISS National Laboratory -- Space Station Explorers, [ARRL](#), and AMSAT.





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Holiday Gift Guide Brought to You by ARRL



Looking for the perfect holiday gift for the radio amateur in your life? ARRL has made shopping easy for you with our 2023 Holiday Gift Guide. We've brought together 10 great companies offering their seasons best. You can view it [on our website](#).

VOTA Red Badge Day Is December 17

2023 has been a fun operating year for ARRL's Year of the Volunteers with the Volunteers On the Air (VOTA) event. To help members boost their VOTA point totals, ARRL is hosting a Red Badges on the Air activity on December 17, 2023, from 1500 - 2100 UTC. The objective of the event is to provide an opportunity for VOTA participants to work more ARRL officers and elected officials, such as Directors or Section Managers and Headquarters staff members





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and volunteers, who offer higher point values in the yearlong event.

ARRL Radiosport Manager Bart Jahnke, W9JJ, explained, "The badges they wear at hamfests, conventions, and other formal occasions are red, hence the term Red Badges on the Air. ARRL red badges are worth a lot of points -- as much as 300 points per contact for working ARRL President Rick Roderick, K5UR -- so participants can quickly increase their VOTA points tally.

Jahnke stressed that the event is "an activity day, not a contest"; there's no required amount of operating time. Participants can call "CQ VOTA" on phone or "CQV" on CW or digital modes. While the event is focused on encouraging those with ARRL red badges to hand out VOTA points, all activity is welcome, regardless of point value (every ARRL member is worth at least one point in the operating event). Participants get credit for each band or mode contact, regardless of point value. ARRL VOTA participants can use the leaderboard to determine how many points they've accumulated.

Read more about the event on [ARRL News](#).





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Amateur Radio in the News

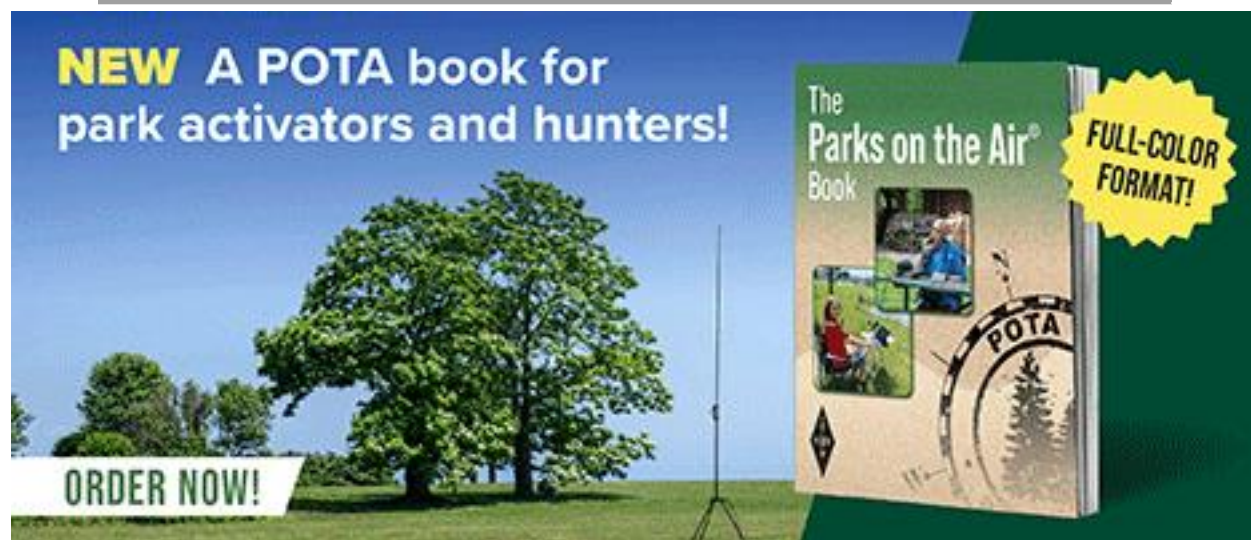
ARRL Public Information Officers, Coordinators, and many other member-volunteers help keep amateur radio and ARRL [in the news](#).

["Ham Radio in Space: Engaging with Students Worldwide for 40 Years"](#) / NASA November 29, 2023

["CERTs from across the region will hold emergency rescue training in Eugene this Saturday"](#) / KLCC (Oregon) November 30, 2023 -- Community Emergency Response Teams (CERTs).

["All hands on deck for Emergency Alert and Ham Radio teams"](#) / Vashon-Maury Island Beachcomber (Washington) December 6, 2023 -- Voice of Vashon Emergency Alert Team.

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ARRL Podcasts

On the Air

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The Value of Contest Clubs





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"Contesting encompasses so much of the hobby," says seasoned tester Craig Thompson, K9CT, in the current episode of the [On the Air podcast](#), "from station building, learning how to operate, understanding propagation, knowing the rules, learning from your peers," that there's something in it for every ham radio operator. As current member and former president of the Society of Midwest Contesters, Craig knows the ins and outs of running a contest club and ensuring that the value proposition makes sense to the average member. In this episode, Craig talks about why you might want to get involved with a contest club, what it entails, and how these specialized clubs stir up on-air activity that benefits every ham. This discussion extends the November/December 2023 *On the Air*, "Joining a Contest Club," by Leanna Figlewski, KC1RMP.

ARRL Audio News

Listen to [ARRL Audio News](#), available every Friday. ARRL Audio News is a summary of the week's top news stories in the world of amateur radio and ARRL, along with interviews and other features.

The On the Air podcast is available on iTunes. The On the Air podcast and ARRL Audio News are also on blubrry -- [On the Air](#) | [ARRL Audio News](#).



Announcements

2023 SKYWARN™ Recognition Day participants can now obtain an electronic QSL card by visiting the [NOAA SKYWARN website](#). Step-by-step instructions are available to those who've submitted their log(s) to help them construct and print a 2023 QSL participation certificate. The deadline for submitting logs is January 31, 2024. Additional information is available on the [SKYWARN Facebook page](#).

The New Amateur Extra-Class Question Pool has been released and is effective July 1, 2024. The [National Conference of Volunteer Examiner Coordinators](#) (NCVEC) [Question Pool Committee](#) (QPC) has released the 2024 - 2028 Extra-Class FCC Element 4 Question Pool and Syllabus to the public. The new [Extra-Class Question Pool is effective from July 1, 2024, through June 30, 2028](#). The 2024 - 2028 pool is available as a Microsoft Word document and as a PDF. The 10 graphics required for the new Extra-Class Question Pool are available within the documents or separately in PDF and JPG file formats. Extra-class examination candidates preparing for their exams using the 12th edition of [The ARRL Extra Class License Manual](#) or the 5th edition of [ARRL's Extra Q & A](#) are encouraged to test on or before June 30, 2024. New editions of ARRL licensing publications will be available in May for exams taken on or after July 1, 2024. Read more on [ARRL News](#).

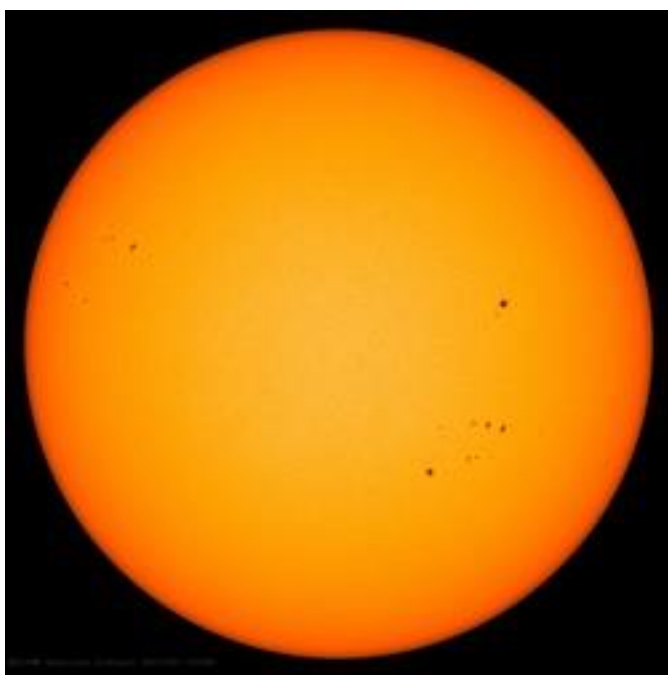


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The K7RA Solar Update

Tad Cook, K7RA, of Seattle, Washington, reports for this week's ARRL Propagation Bulletin, ARLP049:



The solar disk image was taken on December 7, 2023.



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[Photo courtesy of NASA SDO/HMI]

Six new sunspot groups emerged over this reporting week, November 30 to December 6, 2023.

Using the previous week's bulletin as a template, last week's averages were not updated, although all the correct data was there. This week's bulletin includes the updated averages from last week.

Instead of 83.3 being the average daily sunspot number, it was actually 165.9, which dropped this week to 121.1.

Instead of an average daily solar flux of 146, it was actually 181.5, which declined this week to 146.5.

Instead of the average daily planetary A index of 10.1, it was actually 11.6, which rose this week to 17.1. Instead of the average middle latitude A index of 7.3, it was 9, which rose this week to 11.4.

Predicted solar flux is 130, 135, 135, and 140 on December 7 - 10; 130 on December 11 - 13; 140 on December 14 - 16; 150 on December 17; 160 on December 18 - 26; 155, 150, 145, and 140 on December 27 - 30; 136, 134, and 130 on December 31 through January 2, 2024, and 132 on January 3 - 5.

Predicted planetary A index is 8 on December 7; 5 on December 8 - 10; 8 on December 11 - 12; 5 on December 13 - 17; 15, 25, 8, 5, 20, and 10 on December 18 - 23; 5 on December 24 - 30; 25, 10, and 8 on December 31 through January 2, 2024, and 5 on January 3 - 6.

Read about a big hole in the sun at <https://bit.ly/41adYDC> and the sun's new active region at <https://bit.ly/3RxtCWG>.

Don't forget, the ARRL 10-Meter Contest is this weekend. Visit <https://www.arrl.org/10-meter> to learn more.

Sunspot numbers for November 30 through December 6, 2023, were 138, 140, 92, 107, 113, 133, and 125, with a mean of 121.1. The 10.7-centimeter flux was 166.5, 162, 148.2, 139.2, 137.8, 141.6, and 129.9, with a mean of 146.5. Estimated planetary A indices were 5, 56, 14, 11, 9, 15, and 10, with a mean of 17.1. Middle latitude A index was 4, 30, 11, 10, 9, 9, and 7, with a mean of 7.3.

Send your tips, questions, or comments to k7ra@arrl.net.

A comprehensive K7RA Solar Update is posted Fridays on the ARRL website. For more information concerning radio propagation, [visit](#) the ARRL Technical Information Service, [read](#) "What the Numbers Mean...", and [check out](#) the Propagation Page of Carl Luetzelschwab, K9LA.



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A propagation bulletin [archive](#) is available. For customizable propagation charts, visit the [VOACAP Online for Ham Radio](#) website.

[Share](#) your reports and observations.

A weekly, full report is posted on [ARRL News](#).

Just Ahead in Radiosport

Yearlong -- [ARRL Volunteers On the Air](#) (VOTA). See the State Activations Schedule for weekly [W1AW Portable Operations](#), including:

- December 6 - 12 -- Louisiana W1AW/5
- December 6 - 12 -- Illinois W1AW/9
- December 6 - 12 -- Hawaii W1AW/KH6
- December 13 - 19 -- Montana W1AW/7
- December 13 - 19 -- Maine W1AW/1
- December 13 - 19 -- Indiana W1AW/9
- December 17 -- [VOTA Red Badge Day](#)



Upcoming Contests:

- December 12 -- Worldwide Sideband Activity Contest (phone)

Visit the [ARRL Contest Calendar](#) for more events and information.

Editors Note: Contests can be a great place to rack up final points for the Volunteers On the Air (VOTA) operating event. VOTA ends December 31, so get those points while you can! All you need to do is upload your logs to the [ARRL Logbook of The World \(LoTW\)](#)

Upcoming Section, State, and Division Conventions

- January 6 | [Ham Radio University](#), hosting the ARRL New York City-Long Island Section Convention, Brookville, New York
- January 12 - 14 | [ARRL Puerto Rico State Convention](#), Hatillo, Puerto Rico
- January 19 - 20 | [Cowtown Hamfest](#), hosting the ARRL North Texas Section Convention, Forest Hill, Texas



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- January 27 | [Winterfest](#), hosting the ARRL Midwest Division Convention, Collinsville, Illinois

Search the [ARRL Hamfest and Convention Database](#) to find events in your area.

Have News for ARRL?

Submissions for the ARRL Letter and ARRL News can be sent to news@arrl.org. -- John E. Ross, KD8IDJ, ARRL News [Editor](#)

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- Listen to [ARRL Audio News](#), available every Friday.
- *The ARRL Letter* is available in an accessible format, posted weekly to the [Blind-hams Groups.io](#) email group. The group is dedicated to discussions about amateur radio as it concerns blind hams, plus related topics including ham radio use of adaptive technology.
- [NCJ -- National Contest Journal](#). Published bimonthly, features articles by top contesters, letters, hints, statistics, scores, NA Sprint, and QSO parties.
- [QEX -- A Forum for Communications Experimenters](#). Published bimonthly, features technical articles, construction projects, columns, and other items of interest to radio amateurs and communications professionals.



Free of charge to ARRL members...



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- [Subscribe](#) to the *ARES Letter* (monthly public service and emergency communications news), the *ARRL Contest Update* (biweekly contest newsletter), Division and Section news alerts, and much more!
- Find ARRL on [Facebook](#)! Follow us on [Threads](#), [X](#), and [Instagram](#)!

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